Complete Summary

GUIDELINE TITLE

Dementia.

BIBLIOGRAPHIC SOURCE(S)

Singapore Ministry of Health. Dementia. Singapore: Singapore Ministry of Health; 2001 Sep. 21 p. [33 references]

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Dementia

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management

CLINICAL SPECIALTY

Family Practice
Geriatrics
Internal Medicine
Neurology
Psychiatry

INTENDED USERS

Advanced Practice Nurses
Hospitals
Nurses
Physician Assistants
Physicians
Psychologists/Non-physician Behavioral Health Clinicians

GUIDELINE OBJECTIVE(S)

- To improve the recognition of dementia, particularly at an early stage of the disease
- To recommend appropriate assessment and management

TARGET POPULATION

Adults with progressive cognitive or behavioural complaints suggestive of dementia, as well as patients who arouse the physician´s or caregiver´s suspicion of cognitive impairment despite absence of complaints

INTERVENTIONS AND PRACTICES CONSIDERED

Risk Assessment/Diagnosis/Management

1. Identification of individuals with progressive cognitive or behavioural complaints suggestive of dementia, as well as those who arouse the physician´s or caregiver´s suspicion of cognitive impairment despite absence of complaints
2. Medical, psychiatric, social and medication history
3. Physical examination with emphasis on detecting causes of delirium and neurological signs
4. Functional and mental status examination
5. Diagnostic tests, including full blood count, serum electrolytes (including calcium), glucose, liver function tests, thyroid function tests, vitamin B_{12} and folate levels, syphilis serology and neuroimaging
6. Clinical diagnosis criteria
7. Medication including treatment with acetylcholinesterase inhibitors, vitamin E or selegiline
8. Referral for educational programmes for caregivers, family support groups, and appropriate care facilities
9. Treatment for behavioural problems

MAJOR OUTCOMES CONSIDERED

Not stated

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence

Level Ia: Evidence obtained from meta-analysis of randomised controlled trials.

Level Ib: Evidence obtained from at least one randomised controlled trial.

Level IIa: Evidence obtained from at least one well-designed controlled study without randomisation.

Level IIb: Evidence obtained from at least one other type of well-designed quasi-experimental study.

Level III: Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies and case studies.

Level IV: Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities.

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Grades of Recommendation

Grade A (evidence levels Ia, Ib): Requires at least one randomized controlled trial as part of the body of literature of overall good quality and consistency addressing the specific recommendation.

Grade B (evidence levels IIa, IIb, III): Requires availability of well conducted clinical studies but no randomised clinical trials on the topic of recommendation.

Grade C (evidence level IV): Requires evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities. Indicates absence of directly applicable clinical studies of good quality.

Good Practice Points: Recommended best practice based on the clinical experience of the guideline development group.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Not stated

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Each recommendation is rated based on the level of the evidence and the grades of recommendation. Definitions of the grades of the recommendations (A, B, C, Good Practice Points) and level of the evidence (Level I- Level IV) are presented at the end of the Major Recommendations field.

C - Individuals who should be evaluated for dementia include those with progressive cognitive or behavioural complaints suggestive of dementia, as well as patients who arouse the physician´s or caregiver´s suspicion of cognitive impairment despite absence of complaints (see the section titled "Early Symptoms of Dementia," below). (Grade C, Level IV)

C - Clinical assessment for dementia should include a focused history of relevant medical, psychiatric, social and medication history, together with a detailed description of cognitive and behavioural symptoms, preferably from a reliable informant as well as from the patient. (Grade C, Level IV)

C - A focused physical examination with emphasis on detecting causes of delirium and neurological signs is an essential part of the initial clinical assessment. (Grade C, Level IV)

C - Functional and mental status examination should also be part of the clinical assessment. A variety of instruments are available for these purposes. (Grade C, Level IV)

C - Patients who do not meet clinical criteria for dementia should be encouraged to return for re-evaluation in 6 to 12 months. Neuropsychological testing to detect subtle cognitive difficulties may also be useful in such patients. (Grade C, Level IV)

C - Diagnostic tests to rule out metabolic and structural causes of dementia should include a full blood count, serum electrolytes (including calcium), glucose, liver function tests, thyroid function tests, vitamin B_{12} and folate levels, syphilis serology and neuroimaging. (Grade C, Level IV)

B - A number of well-validated clinical criteria are available for the diagnosis of Alzheimer´s disease and may be useful in assessing demented patients. (Grade B, Level III)

C - Early diagnosis of dementia may be of help to patients and their families in providing appropriate investigations, treatment and counselling for long-term management. (Grade C, Level IV)

A - Acetylcholinesterase inhibitors have been shown to be of clinical benefit in patients diagnosed by clinical criteria to have Alzheimer´s disease. (Grade A, Level 1a)

A - Rivastigmine has been shown to be of clinical benefit in patients diagnosed by clinical criteria to have dementia with Lewy bodies. (Grade A, Level 1b)

A - Selegiline or vitamin E may also have an effect on delaying disease progression in patients with Alzheimer´s disease. (Grade A, Level 1b)

Early Symptoms of Dementia

Early symptoms of dementia are commonly overlooked and may be erroneously attributed to normal aging by patients, their families and healthcare professionals.

Symptoms which may indicate dementia include:

- Difficulty with learning and retaining new information, e.g., repetitive questioning, unable to recall recent events, conversations, appointments, frequently misplacing objects
- Difficulty managing complex tasks, e.g., unable to follow complex train of thoughts, inability to perform tasks that require multiple steps such as cooking a meal, financial calculations
- Impaired reasoning ability, e.g., unable to respond with a reasonable plan to problems at work or at home, uncharacteristic disregard for normal rules of social conduct
- Loss of spatial ability and orientation, e.g., difficulty driving, organising objects about the home, finding way around familiar places

- Language problems, e.g., increasing difficulty finding the right words and in following conversations
- Impaired recognition problems, e.g., difficulty in recognizing the use of common items in the home or elsewhere, identifying familiar people (in the absence of sensory deficits)
- Behavioural problems, e.g., increased apathy, irritability or suspiciousness

Definitions:

Grades of Recommendation

Grade A (evidence levels Ia, Ib): Requires at least one randomized controlled trial as part of the body of literature of overall good quality and consistency addressing the specific recommendation.

Grade B (evidence levels IIa, IIb, III): Requires availability of well conducted clinical studies but no randomised clinical trials on the topic of recommendation.

Grade C (evidence level IV): Requires evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities. Indicates absence of directly applicable clinical studies of good quality.

Good Practice Points: Recommended best practice based on the clinical experience of the guideline development group.

Levels of Evidence

Level Ia: Evidence obtained from meta-analysis of randomised controlled trials.

Level Ib: Evidence obtained from at least one randomised controlled trial.

Level IIa: Evidence obtained from at least one well-designed controlled study without randomisation.

Level IIb: Evidence obtained from at least one other type of well-designed quasi-experimental study.

Level III: Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies and case studies.

Level IV: Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities.

CLINICAL ALGORITHM(S)

The original guideline document contains a clinical algorithm for the management of dementia.

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Medical practitioners may be familiar with the symptoms of dementia and able to conduct a proper clinical, functional and social assessment of the patient. Doctors and community care groups may also assist caregivers to locate the necessary support required to care for these patients.

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

These guidelines are not intended to serve as a standard of medical care. Standards of medical care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge advances and patterns of care evolve.

The contents of the guideline document are guidelines to clinical practice, based on the best available evidence at the time of development. Adherence to these guidelines may not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care. Each physician is ultimately responsible for the management of his/her unique patient in the light of the clinical data presented by the patient and the diagnostic and treatment options available.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

These guidelines will be utilized by members of the National Neuroscience Institute´s Dementia Programme (Singapore) and data on number of patients seen and diagnosis obtained will be entered into a national Dementia Programme Register. Such data will be periodically audited.

Suggested outcome measures include:

- Number of patients diagnosed with dementia annually (as a proportion of the predicted incidence rates)
- Percentage of dementia patients obtaining a clinical diagnosis
- Percentage of dementia patients receiving the recommended clinical workup, drug and healthcare resource utilization

Physicians who see a sufficient volume of patients with dementia and have access to other healthcare professionals and facilities necessary for the evaluation and management of such patients may also utilize the above audit parameters.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Living with Illness
Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Singapore Ministry of Health. Dementia. Singapore: Singapore Ministry of Health; 2001 Sep. 21 p. [33 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2001 Sep

GUIDELINE DEVELOPER(S)

National Committee on Neuroscience (Singapore) - National Government Agency [Non-U.S.]
National Medical Research Council (Singapore Ministry of Health) - National Government Agency [Non-U.S.]
Singapore Ministry of Health - National Government Agency [Non-U.S.]

GUIDELINE DEVELOPER COMMENT

These guidelines were developed by an expert workgroup appointed by the National Committee on Neuroscience.

SOURCE(S) OF FUNDING

Singapore Ministry of Health (MOH)

GUIDELINE COMMITTEE

National Committee on Neuroscience

Workgroup on Dementia

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Workgroup Members: Dr Christopher Chen Li Hsian (Chairperson); Dr Alexander Patrick Auchus; Dr Chan Kin Ming; Dr Michael Chee Wei Liang; Dr Chin Jin Jih; Prof Kua Ee Heok; Dr Ng Li Ling; Dr Suresh Sahadevan

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

An update is not in progress at this time.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the Singapore Ministry of Health Web site.

Print copies: Available from the Singapore Ministry of Health, College of Medicine Building, Mezzanine Floor 16 College Rd, Singapore 169854.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on January 8, 2002. The information was verified by the guideline developer on February 22, 2002.

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